



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,939	10/23/2003	Scott J. Clifford	16143	6309
43935 7590 07/13/2007 FRASER CLEMENS MARTIN & MILLER LLC 28366 KENSINGTON LANE PERRYSBURG, OH 43551			EXAMINER TADESSE, YEWEDAR T	
			ART UNIT 1734	PAPER NUMBER
			MAIL DATE 07/13/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/691,939

**Applicant(s)**

CLIFFORD ET AL.

**Examiner**

Yewebdar T. Tadesse

**Art Unit**

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 and 22-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12, 22-25 and 32-35 is/are allowed.
- 6) ☒ Claim(s) 26-28, 30 and 31 is/are rejected.
- 7) ☒ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hollstein et al (US 5,320,283) in view of Gengenbach et al (US 2,930,350).

Hollstein et al discloses (see Figs 1-2 and column 6, lines 3-6) a painting apparatus comprising an arm (20) for a painting robot having a housing and an outer end; a wrist assembly (22, 32) having one end attached to the outer end of the arm, the wrist assembly having a second housing (32) being a structural component thereof and formed of a non-conductive material and the wrist having an opposite end for mounting

Art Unit: 1734

a paint applicator (42, 42A). Hollstein et al lacks teaching the housing of the arm formed of a non-conductive material. However, Gengenbach et al discloses (see Figs 1 and 4; column 2, lines 55-63) in an electrostatic spray arrangement a housing (7) of the outer arm (see Fig 4) formed of a non-conductive material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an outer arm being formed of a non-conductive material in Hollstein et al to prevent electric hazards or to properly insulate the electric spray installation in an electrostatic coating system.

4. Claims 26-28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP-11267560 in view of Hollstein et al (US 5,320,283), Bihn (4,712,739) and Gengenbach et al (US 2,930,350)

As to claims 26-27, JP'560 discloses (see English translated Abstract, and Figs 2 and 11) a painting apparatus comprising an arm for a painting robot; an outer end (6); a paint canister (97) mounted inside the housing (see paragraph 51 and Fig 11); a wrist (7) having one end (7a) attached to the outer end of the arm; and a wrist (7b) having an opposite end for mounting a paint applicator (8). JP'560 lacks teaching structural components of the wrist as well as the arm having a housing formed of a non-conductive material. However, Hollstein et al discloses (see Figs 1-2 and column 6, lines 3-6) a wrist assembly (22, 32) having a second housing being a structural component thereof and formed of a non-conductive material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a

Art Unit: 1734

wrist having a housing formed of a non-conductive material in JP'560 to electrically insulate the robot. Bihn teaches an electrostatic or a non-electrostatic painting apparatus mounted on an industrial robot (see column 2, lines 31-35). One in the art would include an electrostatic spray device in JP'560 device to enhance atomization of the painting solution. Gengenbach et al also discloses (see Figs 1 and 4; column 2, lines 55-63) in an electrostatic spray arrangement a housing (7) of the outer arm (see Fig 4) formed of a non-conductive material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an outer arm being formed of a non-conductive material in JP'560 to prevent electric hazards or to properly insulate the electric spray installation.

With respect to claim 28, JP'560 discloses a paint transfer line continuously connecting (see Fig 8) the color changer (11) to an interior of the paint canister for transferring paint from the color changer (11) to the interior of the paint canister (29, 97) and capable of providing electrostatic isolating of the paint canister from the color changer during use of the paint canister for painting.

As to claim 30, in Fig 11 of JP'560, the color changer is mounted outside the arm housing.

5. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP-11267560A in view of Bihn (4,712,739) and Gengenbach et al (US 2,930,350) and Hollstein et al (US 5,320,283) as applied to claim 28 above and further in view of Klein et al (US 2001/0013315). JP'560 lacks teaching a pig removably inserted in the paint

Art Unit: 1734

transfer line and being slidably moveable in the paint transfer line. Klein et al discloses (see Fig 1 and paragraphs 32 and 37) a pig (32) removably inserted in the paint transfer line and being slidably moveable in the paint transfer line. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a pig movable as claimed in JP'560 to introduce only the quantity of paint which is required overall as taught by Klein et al (see paragraph 9).

***Allowable Subject Matter***

6. Claims 1-12, 22-25 and 32-35 are allowed.
7. Claim 29 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. The following is an examiner's statement of reasons for allowance: see reasons for allowance described on the action dated 01/23/2007.

***Response to Arguments***

9. Applicant's arguments with respect to claims 26-31 have been considered but are moot in view of the new ground(s) of rejection.

In the amendment filed on 04/23/2007, the use of "adapted to" language is still noted in claims 1 and 32, line 5 each.

Art Unit: 1734

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yewebdar T. Tadesse whose telephone number is (571) 272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM - 4:30 PM.

Art Unit: 1734

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tucker Phillip can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'YTT' followed by a stylized flourish.

YTT